

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

CORRECTED VERSION

04 MAY 11 REV'D

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 January 2004 (29.01.2004)

PCT

(10) International Publication Number
WO 2004/009762 A2

(51) International Patent Classification⁷: C12N

(21) International Application Number:
PCT/US2003/021706

(22) International Filing Date: 11 July 2003 (11.07.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/319,402 17 July 2002 (17.07.2002) US
60/426,601 15 November 2002 (15.11.2002) US

(71) Applicant (for all designated States except US): **HESKA CORPORATION** [US/US]; 1613 Prospect Parkway, Fort Collins, CO 80525 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **BRANDT, Kevin, S.** [US/US]; 7114 Woodrow Dr., Fort Collins, CO 80525 (US).

(74) Agents: **VERSER, Carol, Talkington et al.**; Heska Corporation, 1613 Prospect Parkway, Fort Collins, CO 80525 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

— without international search report and to be republished upon receipt of that report

(48) Date of publication of this corrected version:

1 April 2004

(15) Information about Correction:

see PCT Gazette No. 14/2004 of 1 April 2004, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FLEA AND TICK OCTOPAMINE RECEPTOR NUCLEIC ACID MOLECULES, PROTEINS AND THEREOF

(57) Abstract: The present invention relates to tick octopamine receptor nucleic acid molecules; to tick octopamine receptor proteins encoded by such nucleic acid molecules; to antibodies raised against such proteins; and to compounds that inhibit the activity of such proteins. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitory compounds. The present invention also includes inhibitory compounds, particularly those that specifically inhibit tick octopamine receptor activity, as well as the use of such compounds to treat animals.

WO 2004/009762 A2